

Notes 5: Essential Linux Commands for Text Processing

cat

Definition:

Concatenates and displays files.

Usage

```
cat [option] [file...]
```

Examples:

- Display the contents of a file:
 - `cat file.txt`
- Concatenate several files into one:
 - `cat file1.txt file2.txt > combined.txt`

tac

Definition:

Concatenates and displays files in reverse.

Usage

```
tac [file...]
```

Examples:

- Display the contents of a file in reverse:
 - `tac file.txt`

head

Definition:

Outputs the first part of files.

Usage

```
head [option] [file...]
```

Examples:

- Display the first 10 lines of a file:
 - `head file.txt`

- Display the first 20 lines of a file:

- `head -n 20 file.txt`

tail

Definition:

Outputs the last part of files.

Usage

```
tail [option] [file...]
```

Examples:

- Display the last 10 lines of a file:

- `tail file.txt`

- Display the last 15 lines of a file:

- `tail -n 15 file.txt`

cut

Definition:

Removes sections from each line of files.

Usage

```
cut [options] [file]
```

Examples:

- Extract the first column from a file:

- `cut -d',' -f1 file.txt`

- Extract multiple columns from a file:

- `cut -d',' -f1,2 file.txt`

sort

Definition:

Sorts lines of text files.

Usage

```
sort [options] [file...]
```

Examples:

- Sort a file alphabetically:

- `sort file.txt`

- Sort a file numerically:
 - `sort -n file.txt`

WC

Definition:

Prints newline, word, and byte counts for each file.

Usage

```
wc [options] [file...]
```

Examples:

- Count lines, words, and characters in a file:
 - `wc file.txt`
- Count only lines in a file:
 - `wc -l file.txt`

diff

Definition:

Compares files line by line.

Usage

```
diff [options] file1 file2
```

Examples:

- Compare two files:
 - `diff file1.txt file2.txt`

grep

Definition:

Searches for patterns in files.

Usage

```
grep [options] pattern [file...]
```

Examples:

- Search for the word "error" in the file:
 - `grep "error" file.txt`
- Count the number of lines that contain the word "success":
 - `grep -c "success" file.txt`